

**Neal, Arthur**

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**Sent:** Tuesday, August 16, 2005 7:51 PM  
**To:** National List  
**Subject:** Comments RE: TM-04-07  
**Attachments:** ATTACHMENT.TXT

Dear Sirs or Madam;

We are writing these comments in support of discontinuing the prohibition of the substance peracetic acid (peroxyacetic acid) for organic crops or processing additives.

As the agency well knows, the NOSB recommended peracetic acid to the NOP for inclusion in the final list. The product was NOT included, and this author has asked many sources as to the rationale for its non-inclusion, and it still remains unclear as to the reasoning.

I think it may be redundant to adequately express the safety, toxicology, and chemistry of peracetic acid, as the NOSB has adequately reviewed and fully studied the product in its evaluation processes in the late 1990's.

The product peracetic acid (PAA) is made by blending hydrogen peroxide (HP) with acetic acid, which yields a 3-way equilibrium between HP-PAA and acetic acid. Various concentrations and ratios of PAA-HP can be formulated quite easily by those knowledgeable in the art.

Peracetic acid (PAA) is undoubtedly the most "organic" of all alternative disinfectants/ sanitizers/ water treatment compounds, especially considering the chemicals left on the list: chlorine dioxide (and sodium chlorite), sodium hypochlorite, and calcium hypochlorite, which produce carcinogenic by-products such as THM's. However, it is not my focus to bash other chemicals on the list.

Peracetic acid can be made safely without inhibitors such as the typical HEDP (HydroxyEthylene-Di-Phosphonic acid). It can also be made with organically produced distilled white vinegar as the source of acetic acid if synthetic acetic acid is not allowed or may also be a concern. The hydrogen peroxide is already approved for many for the uses that PAA would be considered. However, PAA is a very potent oxidizer and disinfectant, and is estimated to be 50-100 times more potent than HP, and would be a much better candidate for these uses due. PAA-HP combinations degrade to carbon dioxide, oxygen and water in the environment and would be an excellent "organic" alternative to chlorination chemistry of any kind.

Not being remotely knowledgeable about the NOP's original motives or rationale about not including PAA-HP formulations in the final list, I will offer the following suggestions: Acetic acid is a food ingredient and a food product simultaneously. It is GRAS status, and poses no risk to humans or the environment. Hydrogen peroxide is a peroxygen chemical that degrades in the environment to water and oxygen, and poses no risk to humans or the environment. PAA is essentially acetic acid with an extra oxygen molecule that is donated very easily and the degradate is acetic acid, which quickly converts to acetate, virtually identically as does acetic acid. PAA formulas can be made quite easily and safely without HEDP additives (which removes any synthetics that may be of a concern), and PAA can also be made with distilled white vinegar if this is a concern as well.

With this in mind, one must ask oneself, why are chlorine and chlorine-based products on the list, yet PAA, which is indeed the most organic product of the group, (and yields no health or by-product concerns) NOT on the list?? If the NOP has issues about how the PAA is made, it could be addressed easily by issuing limitations.

Regards,

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